U.S. Fish & Wildlife Service

Deer Flat

National Wildlife Refuge





About the Refuge

Deer Flat National Wildlife Refuge has two units, Lake Lowell and the Snake River Islands. The Lake Lowell Unit encompasses 10,619 acres, including the almost 9,000-acre Lake Lowell and surrounding lands. The Snake River Islands Unit contains about 1,200 acres on 104 islands. These islands are distributed along 113 river miles, from the Canyon-Ada County Line in Idaho to Farewell Bend in Oregon.

Diverse Habitats

The refuge provides a mix of wildlife habitats, from the open waters and wetland edges of Lake Lowell to the sagebrush uplands around the lake and the grasslands and riparian forests on the Snake River islands. With assistance from local growers, the refuge also cooperatively farms 240 acres to provide food for wildlife.

The variety of habitats makes Deer Flat NWR an important breeding area for resident and migratory birds and other wildlife. The refuge is also a significant resting and wintering area for birds migrating along the Pacific Flyway, including spectacular concentrations of mallards and Canada geese.

A System of Refuges

Deer Flat NWR is one of the oldest refuges in the National Wildlife Refuge System, which now includes over 560 refuges. Managed by the U.S. Fish and Wildlife Service, the System preserves a network of lands and waters set aside for the conservation and management of the nation's fish, wildlife, and plant resources for the benefit of present and future generations.



This blue goose, designed by J.N. "Ding" Darling, has become the symbol of the National Wildlife Refuge System.

A Brief History

Early Settlers

Before settlement, the land that would become Deer Flat NWR was a low-lying area with many springs. In winter, herds of deer and elk came from the mountains to eat the abundant grasses. Early settlers observing these herds dubbed the area Deer Flat.

Needing water to irrigate crops, settlers initially restricted their settlements to land near rivers. In the early 1900s, they began lobbying and raising money for a reservoir. The Bureau of Reclamation began work on the Deer Flat Reservoir in 1906.

Creating Lake Lowell

Between 1906 and 1908, two large and two small earthen embankments, or dams, were built to contain the reservoir. The Upper Dam was

constructed using a small-gauge train to haul, dump, and compact the material. Horse teams were used on the Lower Dam. Workers also constructed a diversion dam on the Boise River and enlarged the New York Canal, which brings water from the Boise River to the reservoir.



local landowners greeted it with outrage rather than cheers because most of the water first used to fill the reservoir either evaporated or leaked out. Fortunately, the reservoir soon began to hold water.

In 1945, Deer Flat Reservoir was

The reservoir was completed in 1908

at a cost of \$2,500,000. Unfortunately,

In 1945, Deer Flat Reservoir was renamed Lake Lowell in honor of James H. Lowell, who had spearheaded efforts to establish the reservoir in his position as president of the local water users' association. Lake Lowell is now one of the largest off-stream reservoirs in the American West, with the capacity to irrigate over 200,000 acres of land.

Establishment of the Refuge

Left: Deer Flat steam shovel

Below: Horse teams compacting the dam

With the reservoir completed, President Theodore Roosevelt realized that a nearly 9,000-acre lake in an arid region would be an oasis for wildlife, so he created Deer Flat NWR in 1909, just three days after water started flowing into the reservoir through the New York Canal. The refuge remained unstaffed until 1937, when 36 islands in the Snake River were added to protect a riparian corridor for wildlife. Through land purchases, donations, and other land-acquisition methods, the refuge eventually expanded to about 11,800 acres.



A Brief History continued

Work Crews

Civilian Conservation Corps crew working on parapet wall



Refuge Visitor Center built by In the 1930s, a Civilian Conservation Corps camp was established at the Lower Dam and grew to over 100 corpsmen, who spent many years quarrying lava rock to face both dams. Crews from the Works Progress Administration also worked on refuge projects. Some created

> nesting islands in the eastern portion of the lake, while others would "line up shoulder to shoulder and walk around the lake pulling or digging up...undesirable plants." Both of these programs ended with the start of World War II.

In the early 1970s, Job Corps students from the nearby center in Marsing, Idaho constructed many of the current refuge facilities, including the

Visitor Center, shop, a residence, and facilities at the Lower Dam Recreation Area.



Seasons of Wildlife

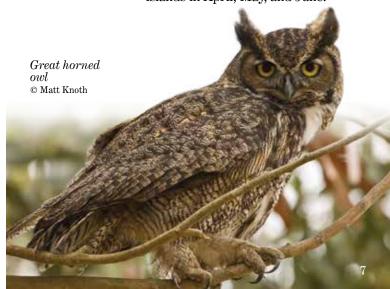
Spring

Resident Canada geese set up nesting territories on the Snake River islands in early March, and goslings hatch by mid-April. At the same time, large numbers of white-fronted geese gather on the Snake River below Homedale and Weiser for up to a month before continuing their northward migration.



Canada goose goslings

Bald eagles, osprey, and great horned owls nest on both units of the refuge, with most feeding nestlings by the end of April. Nesting great blue herons, black-crowned night herons, and double-crested cormorants get a slightly later start. They nest in large rookeries on some of the Snake River islands in April, May, and June.



Summer

In early summer, western and Clark's grebes can be seen dancing on Lake Lowell in search of a mate, while nesting bald eagles look for food for their young. Visitors can see large numbers of white pelicans on the lake and large broods of Canada geese on pastures and fields adjacent to the Snake River.

Dancing western grebes



By late July and early August, mallards and wood ducks begin to congregate on the lake, looking for food in flooded vegetation. As summer progresses and the lake is slowly drawn down for irrigation, large numbers of shorebirds come to feed on the exposed mudflats. Look for dowitchers, sandpipers, godwits, yellowlegs, and plovers.

White pelican



Fall

As fall approaches, the number of birds using the refuge increases. The large exposed mudflats continue drawing vast numbers of shorebirds. Resident flocks of ducks and Canada geese are usually on Lake Lowell by the second week of October.

Spotted sandpiper



As cold weather drives migrating ducks and geese south, migratory birds join the resident birds at the lake. Some birds pass through, while others spend the winter. By mid-November, the goose population peaks.

Canada geese



Flocking geese, ducks, and gulls at Lake Lowell USFWS

Seasons of Wildlife continued

Winter

Duck populations peak in mid-December. Geese and ducks roost on the lake at night, their activity usually keeping patches of water open all

Mallard



winter. At dawn, they depart in large flocks to feed in the surrounding area. Visitors can see these flights of ducks and geese at dawn or dusk, or view the large flocks of geese that feed on refuge farm fields during the day.

Bald eagles, which move into the area to feed on weak and injured birds, can often be seen around the lake.

Canada geese in refuge croplands





The Snake River also provides a winter home for a variety of waterfowl, including goldeneyes, scaup, mergansers, buffleheads, wood ducks, greenwinged teals, and a large number of mallards.

Managing Habitats

Wildlife needs a variety of habitats for food, shelter, and raising young. Deer Flat NWR is managed to improve and maintain habitat for wildlife.

Lake Lowell habitats



Wetland Habitats

Yellow-headed blackbird



Western grebes in smartweed

During spring and summer, water is released from Lake Lowell to irrigate surrounding farm fields. This slow draw-down of the lake exposes mudflats that provide abundant habitat for shorebirds. The lake also produces a bumper crop of aquatic vegetation for birds to feed on, particularly smartweed. In fall, smartweed seeds provide a feast for migratory ducks heading south. The refuge also has marsh areas where the water is manipulated to provide feeding, nesting, and resting habitat for mallards, sora rails, yellow-headed blackbirds, and other wildlife.



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Riparian Forests

Screech owl in a cavity nest



Riparian areas near the lake, as well as many of the refuge islands, contain primarily cottonwood, peachleaf willow, and coyote willow. These areas provide food, nesting sites, and

cover from predators for a variety of tree-dependent species. Of the 320 species of Idaho birds, nearly one-third nest in cavities in hollow trees.

Snake River Islands

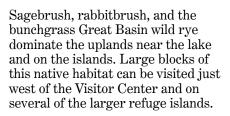
The 104 islands of the Snake River Islands Unit provide a variety of habitats, including areas dominated by grasses, sagebrush, and trees such as maples, box elders, and cottonwoods. These islands provide ideal nesting habitat for Canada geese, ducks, herons, gulls, cormorants, and various songbirds. To protect nesting birds, the islands are closed to all public entry from February 1 to June 14 for most islands, or June 30 for several heron and gull-nesting islands.

Herons in rookery



Uplands

Mule deer in sagebrush upland





Rabbits, gophers, mule deer, and even grasshoppers feed on upland plants and rely on them for nesting sites and cover. Predators such as foxes, coyotes, red-tailed hawks, or American kestrels may later eat these animals.

Croplands

Canada geese in

Farming at Deer Flat is "for the birds." Approximately 240 acres of refuge land is irrigated cropland managed to provide food and cover for wildlife. Local farmers grow corn, beans, peas, wheat, and alfalfa using modern soil-conservation techniques, such as filter strips, and

refuge field

minimal pesticides and fertilizers. The farmers keep a share of the crop and leave the rest for wildlife. Pheasants, deer, and other wildlife feed and nest in these fields. In fall and winter, local Canada geese, migrant geese, and other waterfowl from the north harvest the abundant food available in refuge fields.

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Wildlife Viewing Tips

With over 250 bird species and 30 mammal species on the refuge, the patient observer or photographer has many excellent wildlife viewing opportunities.

When to Visit

The refuge is open all year during daylight hours. Wildlife is generally most active in the mornings and early evenings.

The best season for viewing a wide variety of wildlife is from September through December.

Western meadowlark



Where to Go

Some areas of the refuge are closed to protect wildlife, so watch for signs and check the map.

For an auto tour, drive the 29.5-mile bird tour around Lake Lowell or the 47-mile bird tour that includes the Snake River. Both tours start and end at the east end of the Upper Dam. Written guides for these tours are available at the Visitor Center or on the refuge web site.

Those who prefer to walk can visit the short, self-guided Nature Trail at the Visitor Center. For a longer hike, there are several miles of trails that begin near the Visitor Center, near Gotts Point, and at the end of Tio Lane. How to See Wildlife If driving, your car is an excellent observation and photographic blind. Stay in your car to have better viewing opportunities. If walking, move slowly and quietly to avoid scaring wildlife.

Mule deer



Use binoculars or a spotting scope to view animals up close without disturbing them.

Look closely at your surroundings for tracks, chewed leaves or branches, and any other evidence that animals have been there before you.

Learn more about wildlife. A refuge bird list is available at the Visitor Center. In addition, a good field guide can help you identify the species you see.

Please be considerate. Do not approach other wildlife watchers or wildlife too closely.

Do not pick up wildlife. While you may think that a young animal has been abandoned, more than likely it has a parent watching anxiously nearby.

Pets will scare wildlife before you get a chance to see it. Consider leaving pets at home.

Gull nesting colony on refuge island USFWS

Enjoying the Refuge

The refuge is open to the public all year during daylight hours only. Please help protect wildlife and their habitats by obeying all regulations. Some areas are closed to public use, so please observe signs. Access is allowed through designated accesses only.

Visitor Center

The Visitor Center provides an observation room overlooking Lake Lowell, interpretive panels about the wildlife and history of the refuge, and a kid's activity area.

The Visitor Center is open weekdays from 8:00 am to 4:00 pm and Saturdays from 10:00 am to 4:00 pm, except on Federal holidays. Organized groups can be accommodated at other times by making special arrangements with refuge staff.

Environmental Education

Refuge facilities are available to teachers and other educators to help promote an understanding of wildlife and the natural environment. Refuge staff can provide short presentations to visiting groups or assist teachers before or after visits to the refuge. Call to schedule an educational program or to discuss facility availability.

Disabled Visitors

An accessible fishing dock is available on the west end of the Upper Dam. The Centennial Trail is an accessible interpretive trail from the Visitor Center to and across the Upper Dam. Access difficulty elsewhere varies. Disabled visitors should consult refuge staff for suggestions about visiting the area safely.

Snake River Islands

All refuge islands are closed to all entry from February 1 to June 14 to protect nesting wildlife. Several heron and gull-nesting islands are closed to all entry from February 1 to June 30. Signs indicate seasonal island closure dates.

Vehicle Travel

All motorized vehicles, including all-terrain-vehicles (ATVs), are restricted to county roads. Park only in designated parking areas.



Enjoying the Refuge continued

Hiking

Hiking the Gotts Point Trail

Hiking is allowed seasonally off of designated trails as follows: East Side Recreation Area, all year; Gotts Point, 2/1-9/30; Murphy's Neck, 3/15-9/30; North Side and South Side Recreation Areas, 8/1-1/31.



Boating



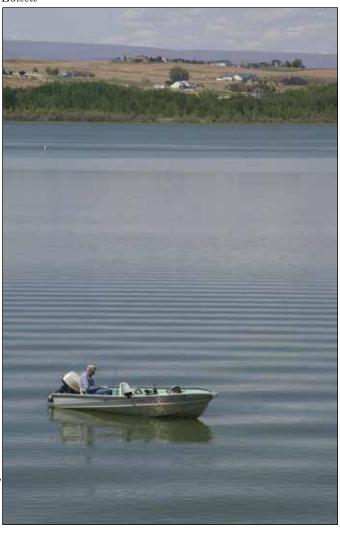
Between April 15 and September 30, motorized and non-motorized boats may be used. Boat-launching facilities are located at the Lower Dam Recreation Area, the east and west ends of the Upper Dam, Access No. 1, and Access No. 7. All launching facilities are subject to closure due to low water levels. Between October 1 and April 14, only human-powered boats may be used, and only in the areas 200 yards in front of the Upper and Lower Dams. Boat ramps are blocked during this time.

Boating is permitted during daylight hours only. Please observe all No Wake Zones. Some are indicated by buoys; however, the No Wake Zone along the south shore is not marked by buoys. It is a 200-yard buffer measured from the edge of the shoreline or the emergent vegetation, whichever is closer to the center of the lake. Some areas, marked by signs or buoys, are permanently or seasonally closed to protect wildlife nesting and foraging habitat. Boaters may not anchor on or pull onto permanently or seasonally closed lands.

Refuge management encourages the use of CARB star-rated motors at the level of two stars and above to minimize negative impacts to water quality.

Kiteboarders and windsurfers may launch from any open shoreline, but must comply with all No Wake Zones.

Fishing Lake Lowell



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Enjoying the Refuge continued

Swimming



Swimming is allowed from April 15 to September 30. Swimmers are encouraged to use designated swimming beaches at the East Upper Dam boat launch and at the Lower Dam Recreation Area. No lifeguards are present, and water quality is not regularly monitored. Swimming is not allowed around fishing facilities or immediately adjacent to boat launch areas.

Organized Group Activities

Limited organized group activities are allowed, but only at the Lower Dam Recreation Area. For event requirements, contact the refuge.

Jogging and Biking





Jogging and biking are allowed on designated multiuse trails and maintained roads in the North Side and East Side Recreation Areas. Groups of more than ten joggers or bicyclists require a Special Use Permit. Competitive events are prohibited.

Horseback Riding



Horseback riding is allowed on designated multiuse trails in the North Side and East Side Recreation Areas. Groups of more than ten horses and riders require a Special Use Permit. Competitive events are prohibited.

Pets



Pets are allowed on designated multiuse trails, on maintained roads, and in the Lower Dam Recreation Area as long as they are on a physical leash (6 feet long or less) at all times. Pet waste must be promptly removed. Hunting dogs may be off leash while actively hunting, but they must remain under strict voice control.

Weapons



Target shooting is prohibited at all times. The use or possession of air guns, spears, gigs, paint-ball weapons, or other weapons other than firearms is prohibited.

Prohibited Activities



Glass containers, open fires, fireworks, camping, overnight parking, driving a motorized vehicle off of roads, using radio-controlled vehicles and drones, on-ice activities other than ice fishing, using metal detectors, gathering wood, and collecting plants, animals, rocks, or other specimens are prohibited.

Area Services



Food, gasoline, campgrounds and motels are available in nearby communities.



Hunting & Fishing

Hunting Regulations

All waterfowl, coot, upland game, and mourning dove hunters on the refuge are required to use non-toxic shot and may not possess lead shot in the field. Hunting dogs must be leashed unless actively hunting and remain under strict voice control at all times. Dog training is not allowed. Target shooting is prohibited.

Contact the Idaho Department of Fish and Game for current hunting regulations.

Although use of permanent blinds is prohibited, portable blinds are allowed if they are removed at the end of each day. Temporary blinds may be constructed from natural vegetation less than 3 inches in diameter and are available on a first-come, first-served basis.

Duck hunting at Lake Lowell Todd Fenzl/USFWS

Lake Lowell Unit Hunting

Hunting on the Lake Lowell Unit is limited to the East Side and South Side Recreation Areas. Only upland game birds, mourning doves, ducks, coots, and deer may be hunted. State seasons apply. Duck and coot hunters are limited to the use or possession of 25 shells per day per hunter. The deer hunt is a controlled hunt; check specific State and refuge regulations. Goose hunting is prohibited throughout the Lake Lowell Unit.

Duck and coot hunting in the East Side Recreation Area is walk-in only; no float tubes or boats are allowed. Duck and coot hunters in the South Side Recreation Area may use float tubes, non-motorized boats, and boats with electric motors only. The use or possession of gas-powered motors is prohibited. Boat use is limited to 200 yards from the water's edge of

 $Canada\ geese$



hunt zones. Duck hunting is not allowed on foot from the ice.

Snake River Islands Unit Hunting

Hunting of waterfowl, coots, upland game, mourning doves, and deer is allowed on all islands of the Snake River Islands Unit during State seasons. Where the Snake River is the boundary between Idaho and Oregon, hunters from either state may hunt the islands according to the regulations of the State for which they are licensed. Lead buckshot is prohibited for hunting deer on the Snake River Islands Unit.

Refuge Signs

Fishing

Game fish in the lake include largemouth bass, smallmouth bass, perch, crappie, bluegill, rainbow trout, channel catfish, and brown bullhead. Contact the Idaho Department of Fish and Game for current fishing regulations. Live, nonnative aquatic bait is prohibited.

Lake Lowell Unit Fishing

Some areas of the refuge are permanently or seasonally closed to protect wildlife; please watch for signs and check the map. During times when hiking is restricted to designated trails to protect nesting birds, access to bank fishing is allowed only from maintained roads and trails and within 100 yards of shoreline on either side of trails accessing the lakeshore. Wading access to fishing is allowed all year in Fishing Areas A and B and April 15 to September 30 from open shoreline. Ice fishing is allowed in Fishing Areas A and B, within 200 yards of the dams, unless otherwise posted by the Bureau of Reclamation.

Snake River Islands Unit Fishing

Fishing from the shore of the Snake River Islands is prohibited during nesting season. All islands are closed from February 1 to June 14. The nesting closure extends through June 30 on a few heron and gull-nesting islands. Watch for signs.



Refuge signs inform visitors of permitted or restricted activities. Please help protect wildlife and their habitats by respecting these signs.



This sign marks the refuge boundary.



Areas designated by this sign are closed to *all* entry year round to protect wildlife.



Areas designated by this or similar signs are closed to *all* entry between the designated dates to protect wildlife.



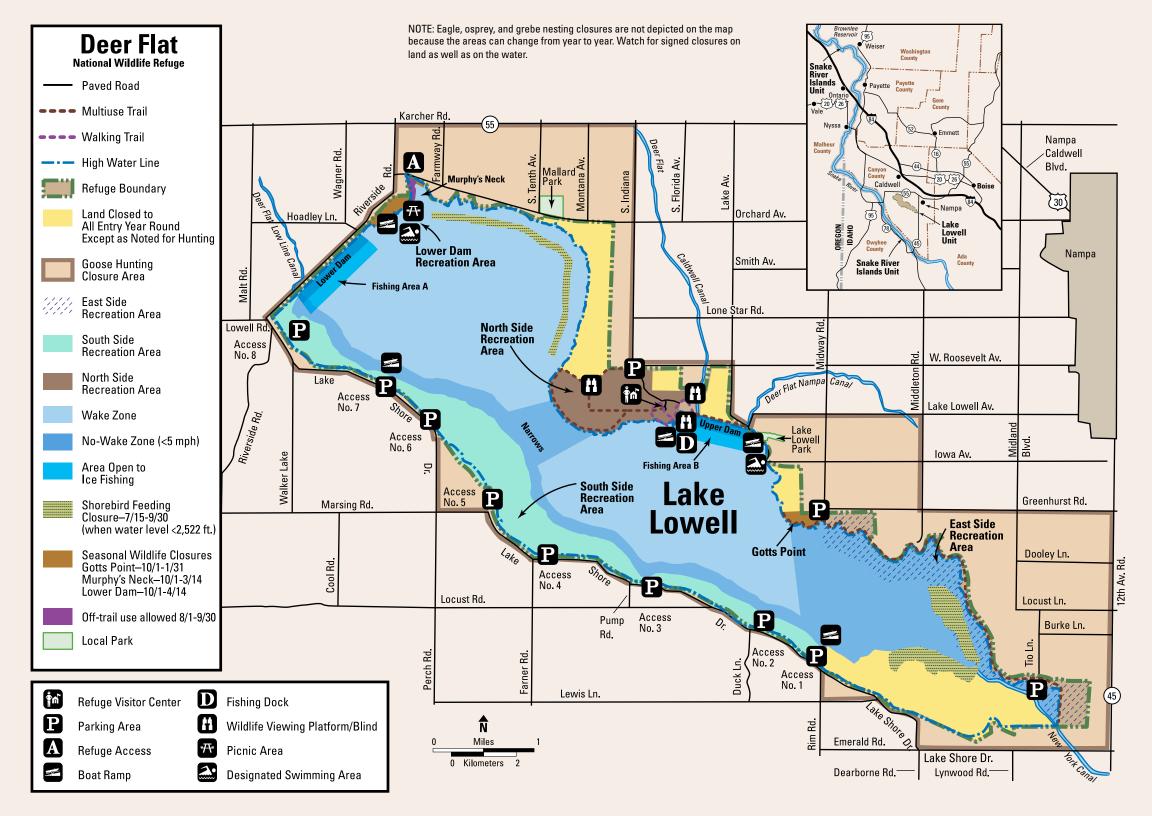
Refuge islands are closed to *all* entry between the designated dates to protect nesting waterfowl and other birds.



Areas designated by this sign may be hunted as permitted by refuge regulations. See the *Hunting and Fishing* section of this brochure for more information. Target shooting is prohibited throughout the refuge.



All migratory bird and upland game hunters on the refuge are required to use non-toxic shot and may not possess lead shot in the field.



For Refuge information 1 800/344 WILD

U.S. Fish & Wildlife Service http://www.fws.gov

 $\begin{array}{c} Cover\ photo:\ Black-necked\ stilt\\ @\ Mark\ Winchester \end{array}$

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